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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,657	07/19/2005	Hiroaki Sudo	L9289.05155	8923

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EXAMINER

DONABED, NINOS J

ART UNIT	PAPER NUMBER
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2444

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12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/542,657	Applicant(s) SUDO, HIROAKI	
	Examiner NINOS DONABED	Art Unit 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This office action is in response to Applicants Request for Continued Examination (RCE) dated 09/22/2008. Claims 9-14 have been amended. Claims 9-14 are pending in the application.

Information Disclosure Statement

2. Documents under the foreign documents, 2004/15143 and 2004/282249 were not taken into consideration by the examiner because an English translation abstract was not present at the time of examination.

All documents under other documents that are stricken through were not considered by the examiner because copies of them were not provided with the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 9 and 12,

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The phrase “a home agent that stores the first care-of-address and the second care-of address in association with a home address for the communication terminal apparatus” is vague and unclear. It is not understood how the first and second COA's are associated with a home address.

Claims 10 and 11 and 13 and 14 are rejected for being dependent on claims 9 and 12 respectively.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venkitaraman (United States Patent Application Publication 2003/0185196) in view of Karoubalis (United States Patent Application Publication Number 20050018637) further in view of Vivaldi (“Fast handover algorithm for hierarchical mobile IPv6 macro-mobility Management”).

Regarding **Claim 9** as best understood,

Venkitaraman teaches a communication system comprising:

an access router that communicates with a communication terminal apparatus and transmits a care-of address to the communication terminal apparatus; (**See figure 1**

and 2 and paragraphs [0022] - [0025], the access routers transmit the care-of-address to the mobile node.)

a home agent that stores the first care-of address and the second care-of address in association with a home address for the communication terminal apparatus, and transmits data that is transmitted to the home address of the communication terminal apparatus to a destination indicated by the first care-of address and the second care-of address; and **(See figure 1 and 2 and paragraphs [0025] - [0026] and Claim 8, a home agent stores the care-of-address and the real address and transmits data to the mobile node.)**

a network that connects the mobility anchor point and the access router, and transmits the first care-of address and the second care-of address to the home agent. **(See figure 1 and 2 and paragraphs [0022] - [0025], a network connects the mobility anchor point and access routers to a home agent with which a mobile node belongs to.)**

Venkitaraman does not explicitly teach a MAP that issues to the communication terminal apparatus communicating with the access router of one of cells on either side of a boundary of two mobility anchor points, the same care-of address that is effective in the cells on either side of the boundary;

Karoubalis teaches issuing to the communication terminal apparatus communicating with the access router of one of cells on either side of a boundary of two mobility anchor points, the same care-of address that is effective in the cells on either side of the boundary; **(See figures 2-8 and paragraphs [0006] – [0010] and claims 9-**

11, Karoubalis teaches ensuring a constant IP address after any type of handover/handoff.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine Venkitaraman with Karoubalis because both deal with transfers of mobile IP including handoff or handover in regards to mobile nodes. The advantage of Karoubalis is that it creates a method which effectively implements the inter-network handover in the wireless network, thus ensuring constant internet protocol-connectivity during the handover to assist in unbounded roaming of the mobile terminal.” **(See paragraphs [0008] – [0010], Karoubalis.)**

Karoubalis does not explicitly teach a mobility anchor point that issues the two care-of addresses of the first care-of address and the second care-of address, which is effective in adjacent cells across boundary of a first mobile anchor point and a second mobile anchor point, to the communication terminal apparatus that communicates with the access routers in adjacent cells.

Vivaldi teaches a mobility anchor point that issues the two care-of addresses of the first care-of address and the second care-of address, which is effective in adjacent cells across boundary of a first mobile anchor point and a second mobile anchor point, to the communication terminal apparatus that communicates with the access routers in adjacent cells. **(See page 1 left column and page 2 left and right columns and figures 1-3, Vivaldi teaches a MAP issuing two COA's to a mobile node effective in adjacent cells.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine the teachings of Vivaldi with the system of Karoubalis because both deal with Mobile Nodes and handoff and handover technologies. The advantage of incorporating the mobility anchor point that issues the two care-of addresses of the first care-of address and the second care-of address, which is effective in adjacent cells across boundary of a first mobile anchor point and a second mobile anchor point, to the communication terminal apparatus that communicates with the access routers in adjacent cells, of Vivaldi, into the teachings of Karoubalis because it improves handover management thus making the system more robust and efficient. **(See page 2, Vivaldi.)**

Regarding **Claim 10** as best understood,
Venkitaraman and Karoubalis communication system according to claim 9, wherein the mobility anchor point makes variable the number of the adjacent cells in which the second care-of address is effective. **(See figures 2-8 and paragraphs [0006] – [0010] and [0024]-[0026], Karoubalis .)**

Regarding **Claim 11** as best understood,
Venkitaraman and Karoubalis communication system according to claim 10, wherein the mobility anchor point detects the moving speed of the communication terminal apparatus, and when communicating with the communication terminal apparatus moving at high speed, makes the number of the adjacent cells larger than in

a case of communicating with the communication terminal apparatus moving at low speed. **See Figure 1 and 2 and paragraphs [0020] – [0029])**

Chubbs, III. teaches an integrated GPS system which can detect the speed of a car. **(See Abstract and Column 1 Line 60 – Column 2 Line 26, Chubbs III .)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine Venkitaraman and Karoubalis with Chubbs, III because GPS systems commonly detect speed of vehicles and mobile nodes are commonly used in vehicles, thus a combination of the inventions would provide for a mobility anchor point system which could detect the speed of a mobile node.

The mobility anchor point after knowing the speed of the mobile node using the GPS system could have issued another care-of-address to a larger group of cells after detecting the speed of the mobile network because this would help increase the efficiency of the connection during handoff of the mobile device, and ultimately protect the integrity of the mobile connection.

Regarding **Claim 12** as best understood,
Claim 12 is substantially the same as **claim 9** and is thus rejected for reasons similar to those in rejecting **claim 9**.

Regarding **Claim 13** as best understood,

Claim 13 is substantially the same as **claim 10** and is thus rejected for reasons similar to those in rejecting **claim 10**

Regarding **Claim 14** as best understood,
Claim 14 is substantially the same as **claim 11** and is thus rejected for reasons similar to those in rejecting **claim 11**

Response to Arguments

7. Applicant's arguments with respect to claim 9-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any response to this Office Action should be **faxed** to (571) 272-8300 or **mailed** to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Hand-delivered responses should be brought to
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, Virginia 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NINOS DONABED whose telephone number is

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(571)270-3526. The examiner can normally be reached on Monday-Friday, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. D./

Examiner, Art Unit 2444

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444